

7. (Amended) A process as claimed in claim 1, where the anions of the metal salt (S) are phosphate, sulfate, nitrate, perchlorate or halide.

8. (Amended) A process as claimed in claim 1, where the cations of the metal salt (S) are iron, nickel, platinum, palladium, cobalt, zinc, silver or copper.

9. (Amended) A process as claimed in claim 1, where the electrolysis liquid contains from 1 to 1000 ppm by weight of metal ions of the metal salt (S), based on the total amount of electrolysis liquid.

10. (Amended) A process as claimed in claim 1, where the electrolysis liquid contains a halogen-containing auxiliary electrolyte.

11. (Amended) A process as claimed in claim 1, where the electrolysis liquid essentially consists of

- a starting compound of the general formula V
- an alcohol of the general formula II
- a halogen-containing auxiliary electrolyte
- catalytic amounts of the metal salt (S)
- possibly the desired products of the general formulae I, III and IV
- possibly other by-products of electrolysis which are derived from the compounds of the general formulae I, II, III, IV and V, and
- if desired, other conventional co-solvents.

12. (Amended) A process as claimed in claim 1, where

- the proportion of the starting compounds and products of the general formulae I, III, IV and V and of the other by-products of electrolysis from the abovementioned compounds is from 1 to 70% by weight,

- the proportion of the alcohol of the general formula II is from 14.9 to 94.9% by weight,
- the proportion of auxiliary electrolyte is from 0.1 to 5% by weight, and
- the proportion of any co-solvents present is from 0 to 70% by weight, based on the electrolysis liquid.

13. (Amended) A process as claimed in claim 1, where the electrolysis is carried out in an undivided electrolysis cell.

14. (Amended) A process as claimed in claim 1, where the anodes employed are made of noble metals, noble-metal oxides, graphite or carbon materials, and the cathodes employed are made of iron, steel, nickel, zinc, noble metals, graphite or carbon materials.